

04-20-05

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Ref. Office Action Summary, Application No. 10/810,426

19 April 2005

Examiner Mr. Kyle M. Riddle

Enclosed, find corrected copy of referenced patent application according to the requirements of subject Office Action Summary.

Sincerely,

*Masachika Arao*  
Masachika Arao

## Response to patent application

The cross-member referenced in Patent 5,682,849 Regueiro differs from the corresponding (yoke) of my patent application No. 10/810,426 in the following respects:

1. In figure 10, Regueiro shows component with its "V" shape and described in claim #6 ---"crosshead is designed so that the contact point between said second spherical joint and said crosshead is located below a line joining the centers of said first spherical joint and said third spherical joint."

### Regueiro

In Section 12, line 60, in the description of fig. 10, ---"each end arm 212 and 214 of each cross member 208 and 210 is formed with a combination spherical and sliding connection 120" which is structurally and functionally the same as provided on the arm 110 of the valve train mechanism seen in FIG. 2. Thus, each arm 214 of the cross members 208, 210 has a half-ball 122" provided with an upwardly extending tongue 124" which fits within a rectangular groove or slot 134" in the arm of the associated crosshead"-----

In response, the yoke of my application differs from Regueiro's cross-member in that it actuates 2 valves traveling together in parallel. Therefore, it does not need the self-centering feature provided by the low contact point, to counter the tendency of friction forces due to the compounded longitudinal and transverse motion of the contact points of the valves to disrupting the centered location of the contact point at the cross-member. In my design, the contact point of the actuating rocker-arm is substantially in line with those at the valve stem ends. In addition, my yoke does not require that "each cross-member 208 and 210 is formed with a combination spherical and sliding connection 120", again do to the absence of extraneous motions of the contact points of the valves associated with Regueiro's invention.